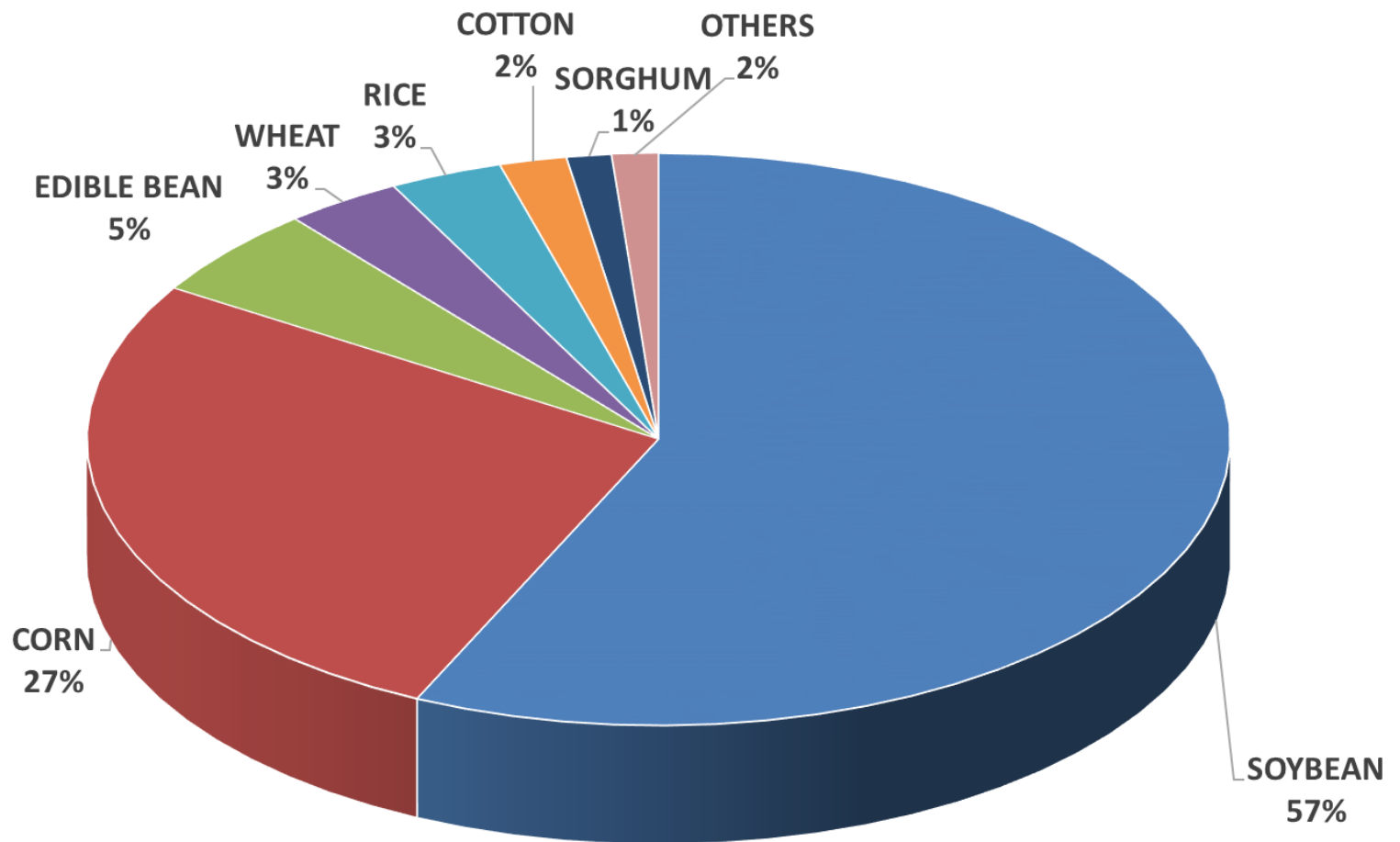


Brazilian Corn and Soybean Outlook: the main opportunities and challenges

Thomé Luiz Freire Guth
Manager of Agricultural Products Management

Brazilian soybean and corn overview

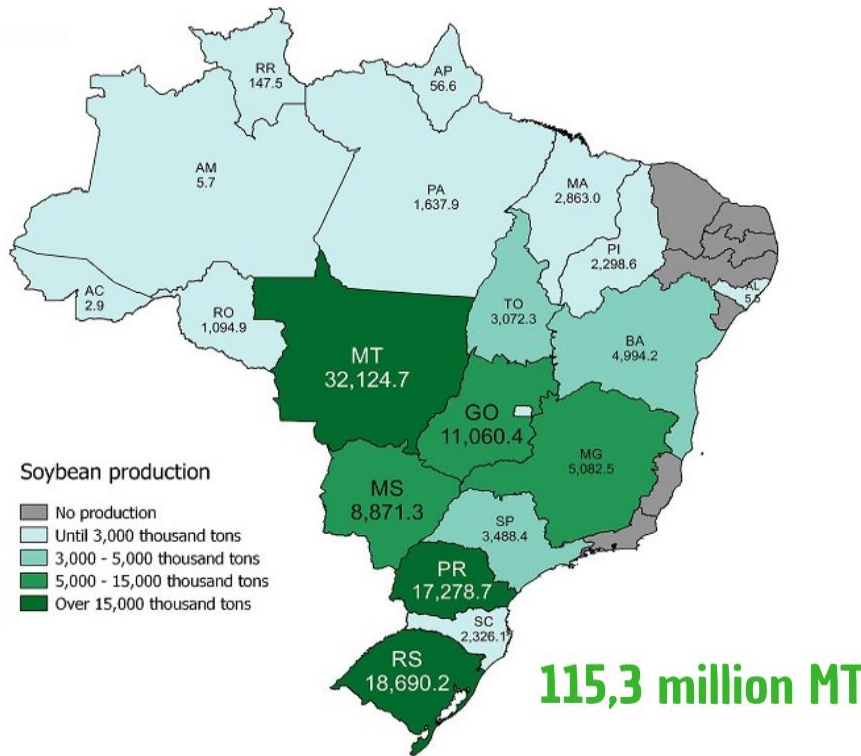
Percentage share of main brazilian crops



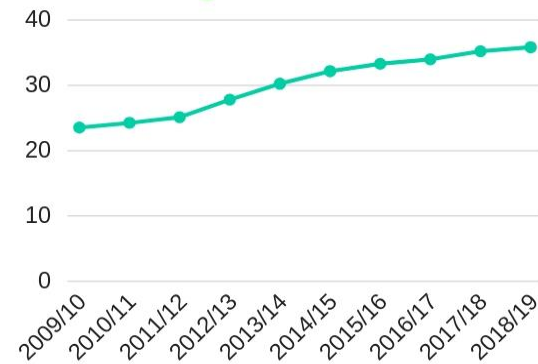
Source: Conab

Soybean

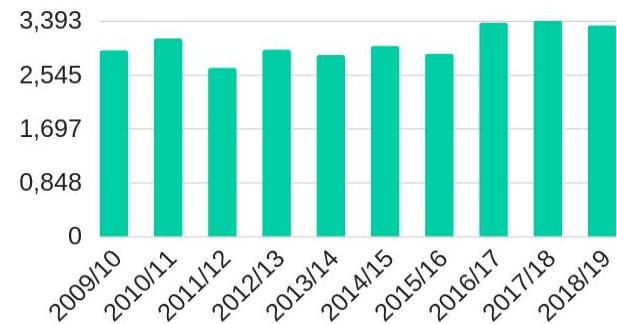
2018/19



Acreage (million Ha)

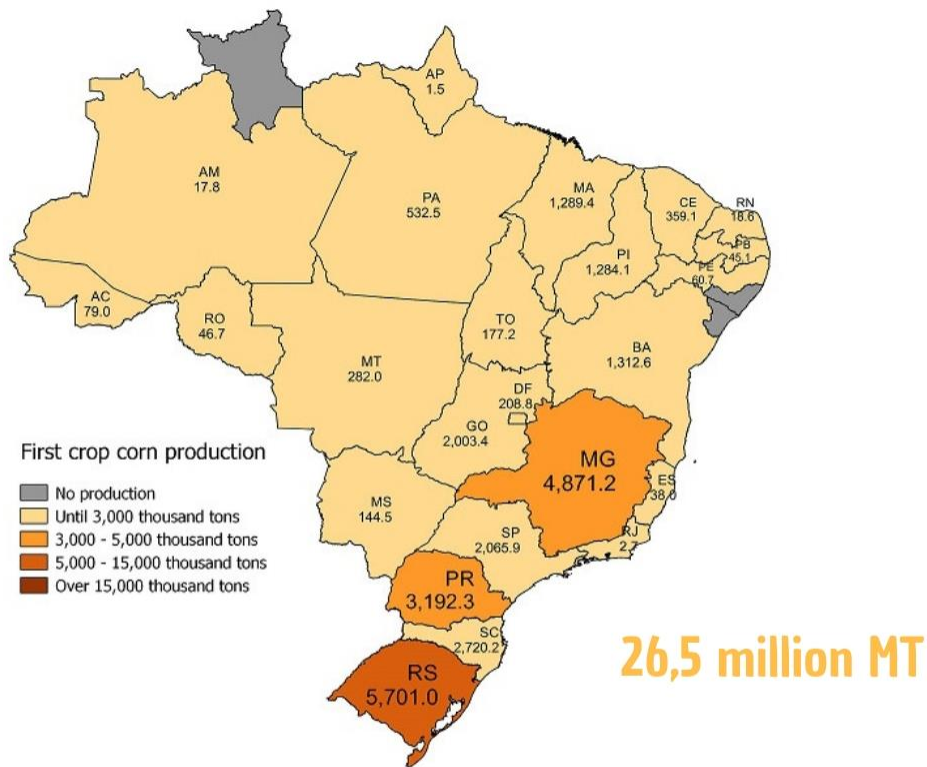


Yield (MT/ha)



Corn 1st Crop

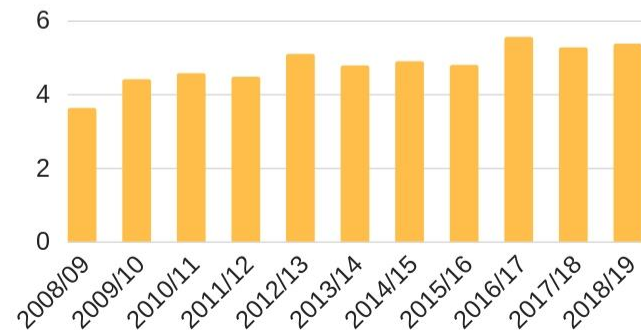
2018/19



Acreage (million Ha)

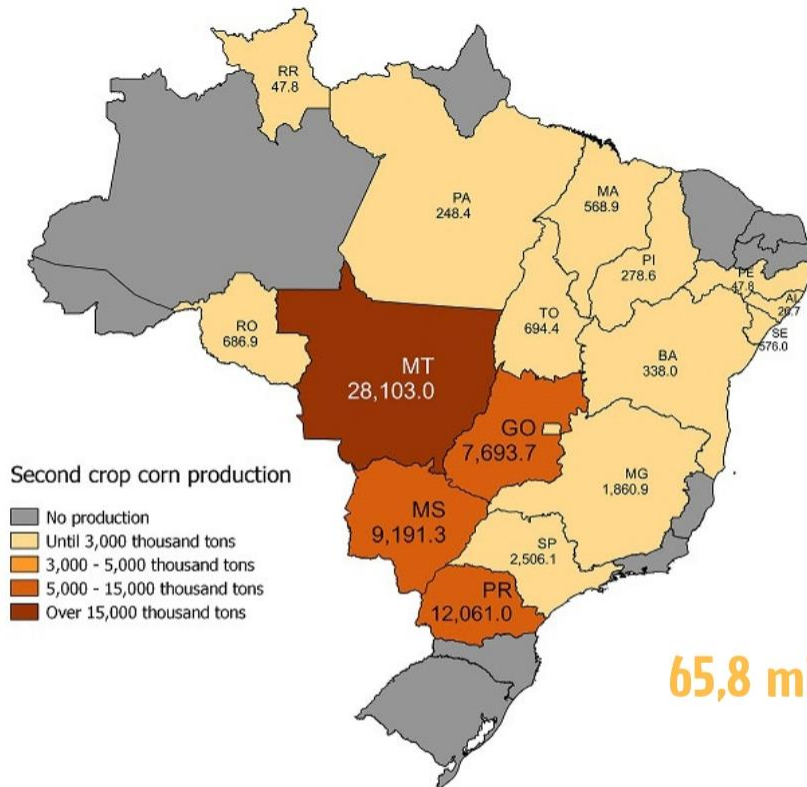


Yield (MT/ha)



Corn 2nd Crop

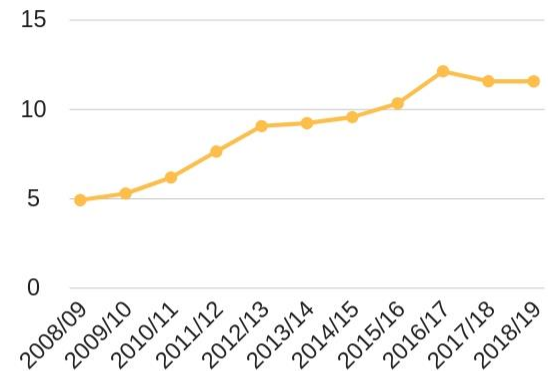
2018/19



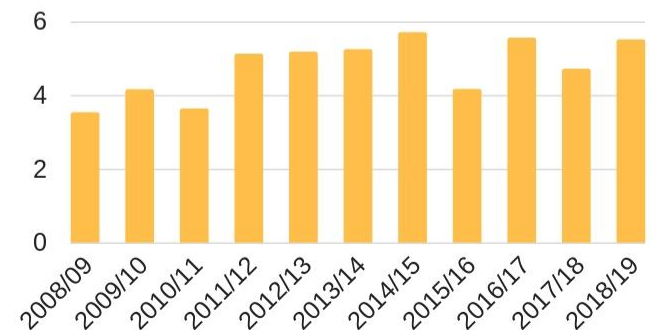
65,8 million MT



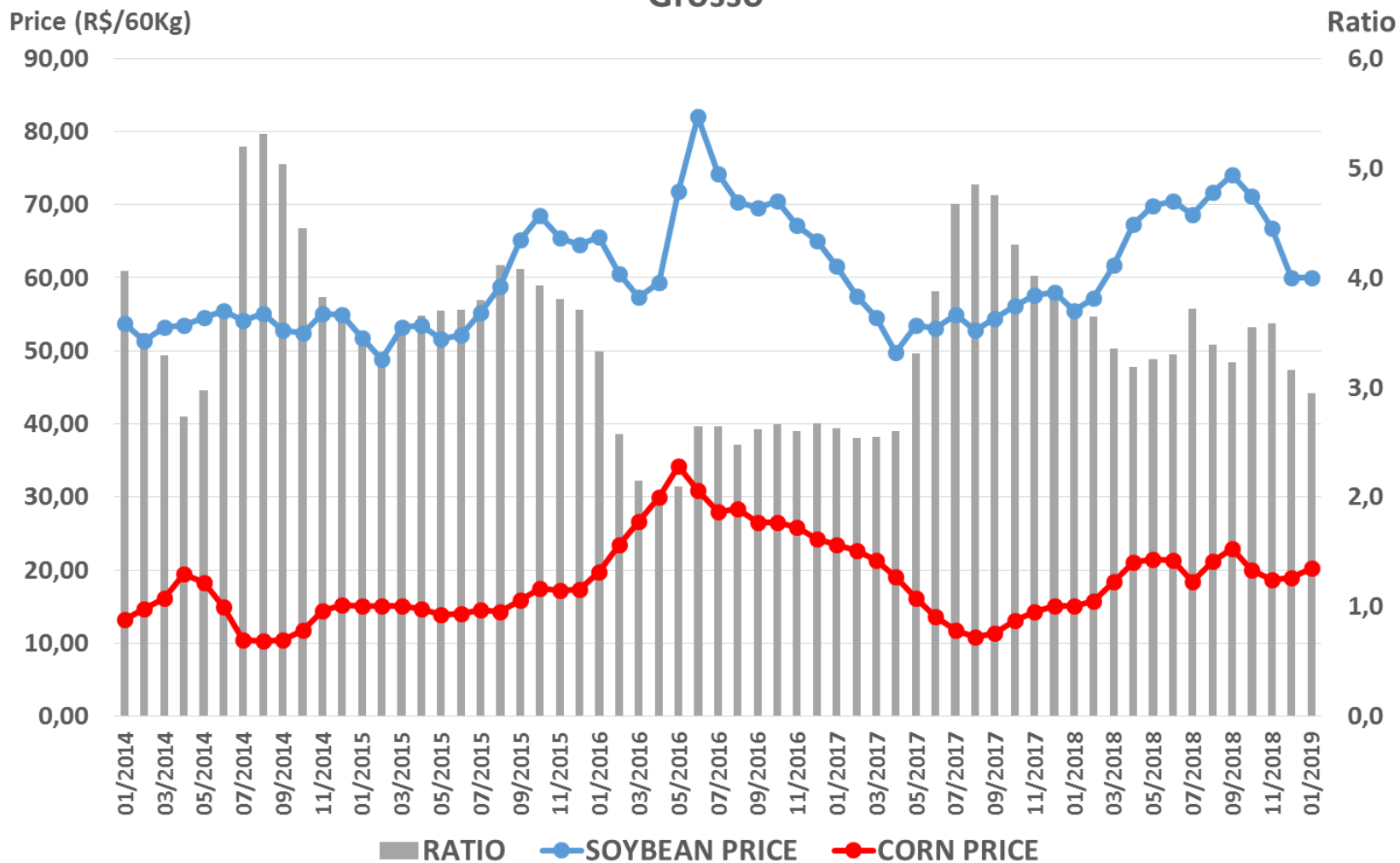
Acreage (million Ha)



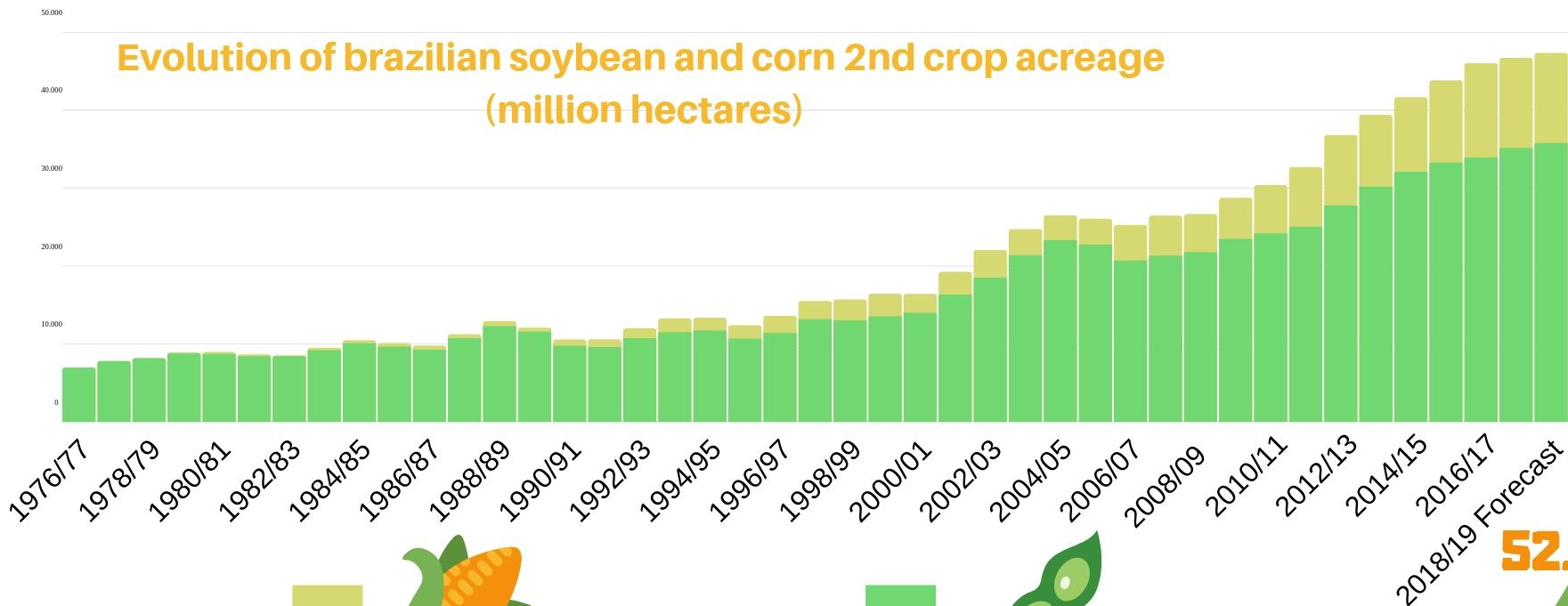
Yield (MT/ha)



Comparison between soybean and corn prices in Sorriso - Mato Grosso



Evolution of brazilian soybean and corn 2nd crop acreage (million hectares)



**2nd corn area crop
represents on season 2018/19**

32%

**Estimate area for soybean
is 35.8 million ha in 2018/19**

1.7%

2009/10

2017/18

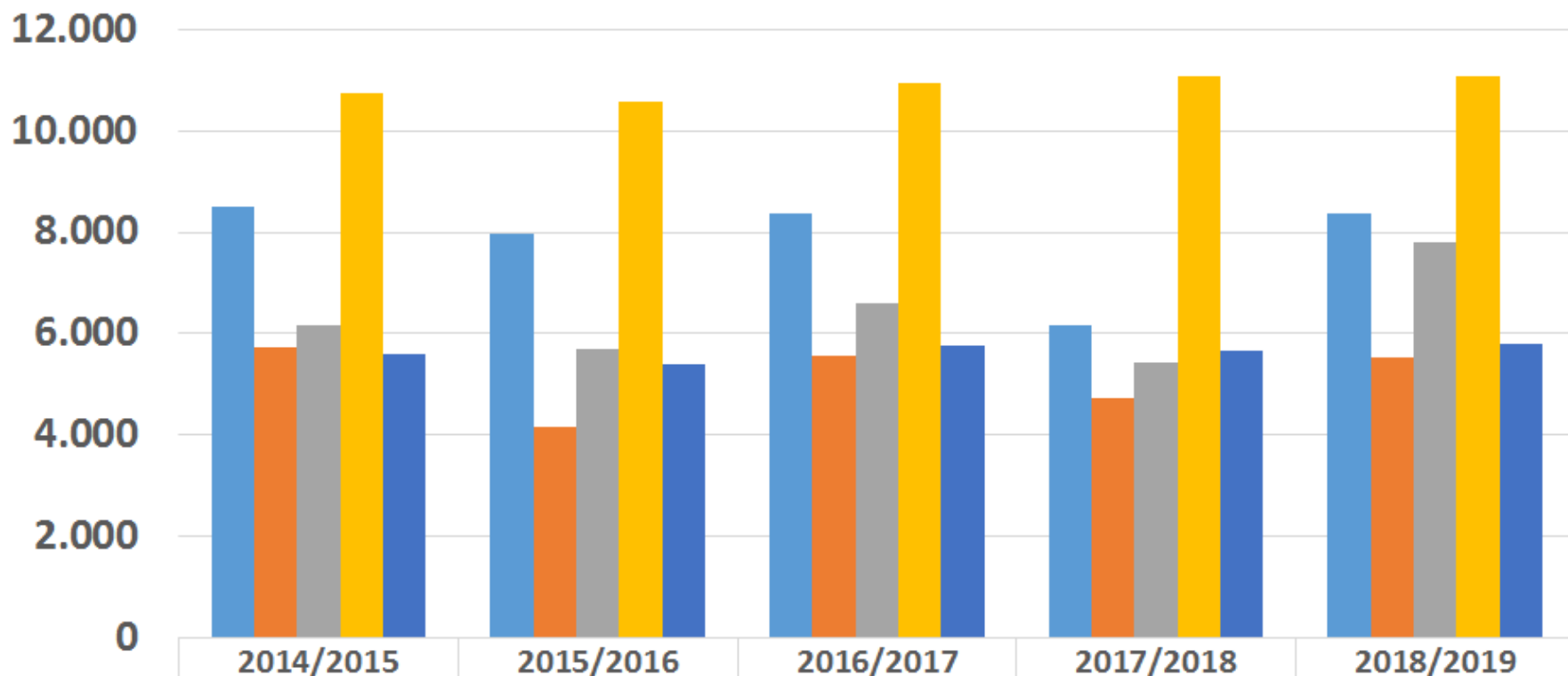
52.7%



Opportunities

- Brazil has a possibility to increase its yield;
- Brazil has improved technology, especially for corn production year by year (hybrids seeds, rational use of fertilizers, good technology of seeding and harvest, etc);
- Development of Arco Norte Ports;

Comparison of major exporters corn yield (Kg/MT)



■ Argentina

■ Brazil

■ Ukraine

■ United States

■ World

8.500

7.970

8.370

6.150

8.360

5.717

4.174

5.564

4.722

5.519

6.150

5.710

6.600

5.440

7.800

10.730

10.570

10.960

11.080

11.070

5.600

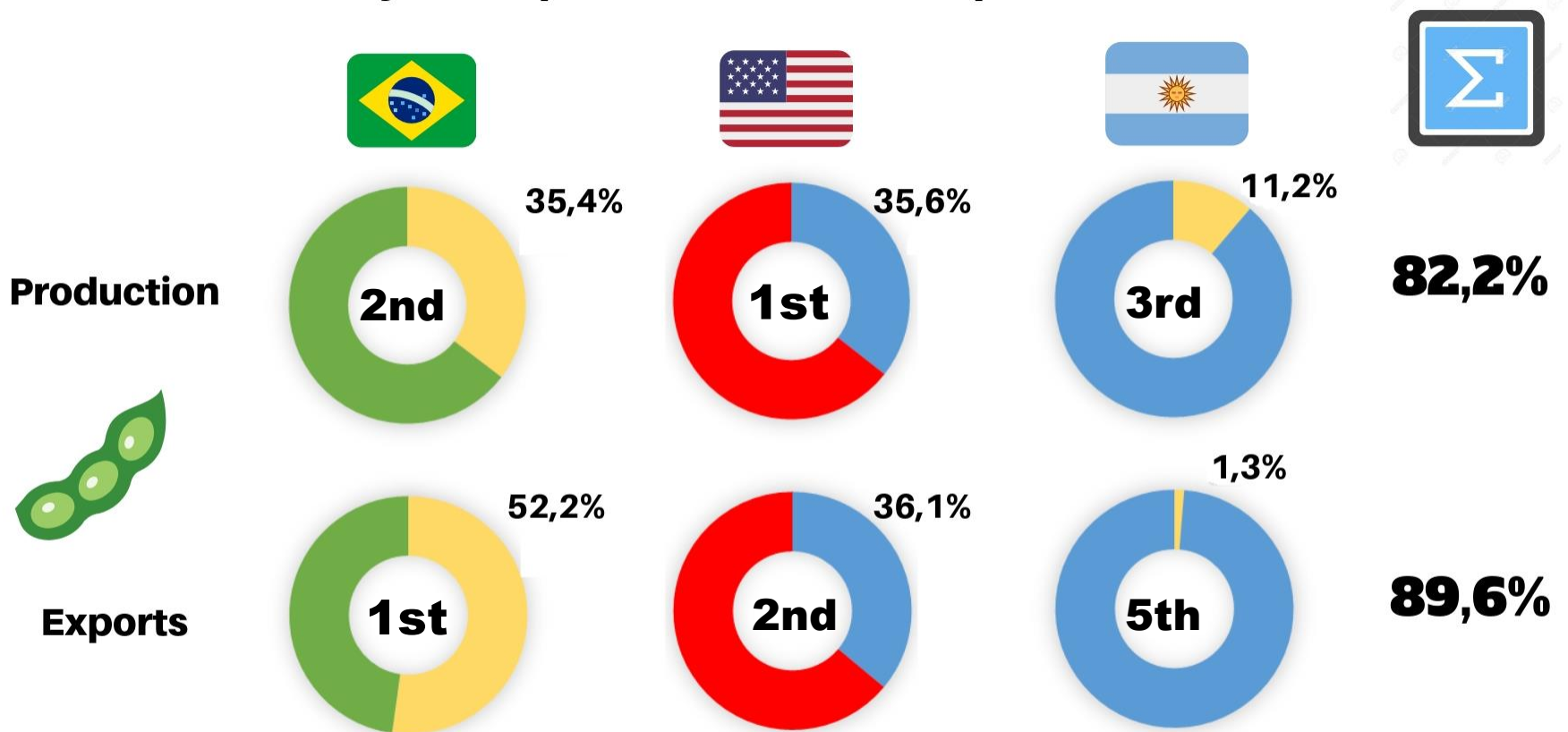
5.400

5.780

5.650

5.810

Soybean production and exports

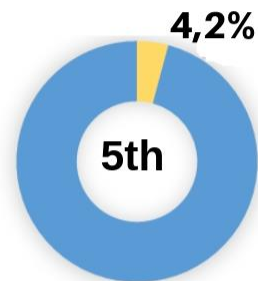
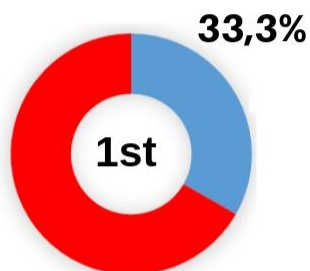
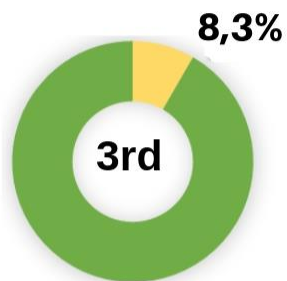


Corn production and exports

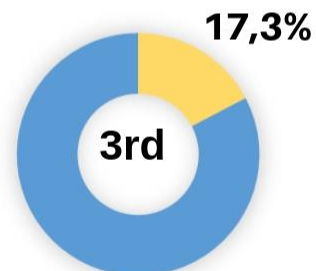
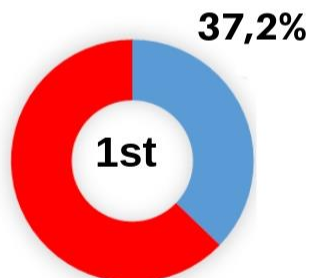
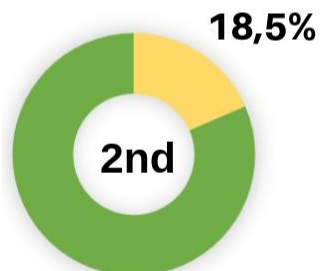
Production



Exports



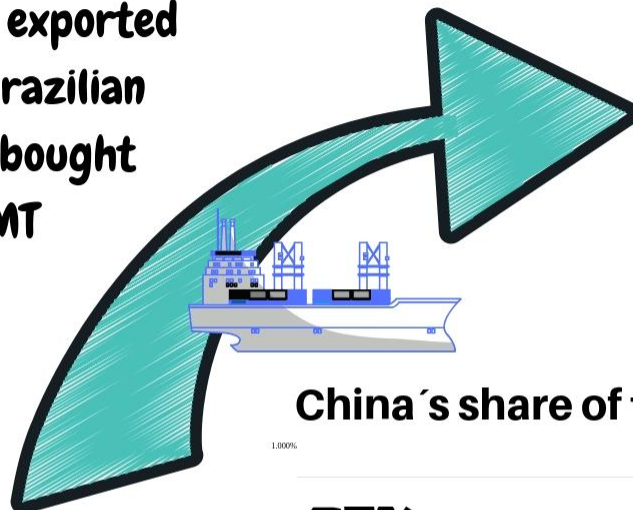
45,8%



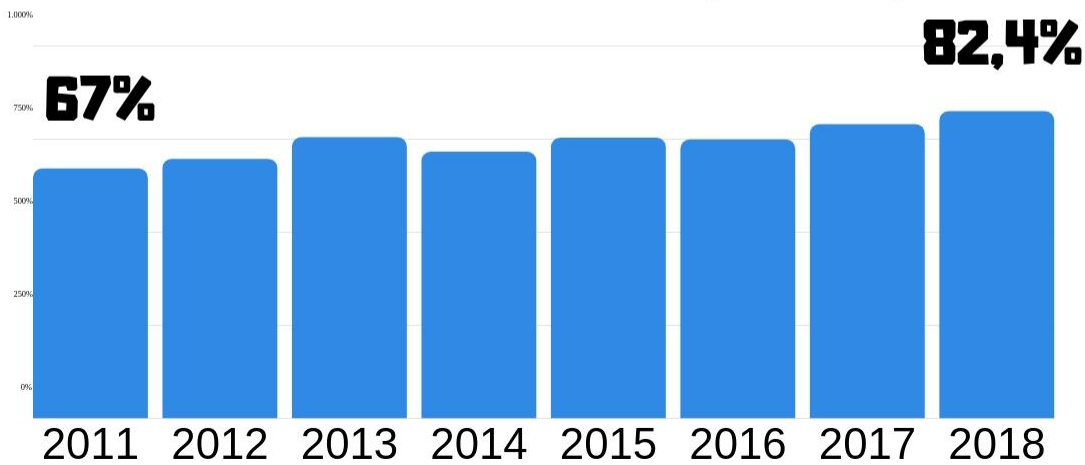
73,0%

Brazilian soybean exports

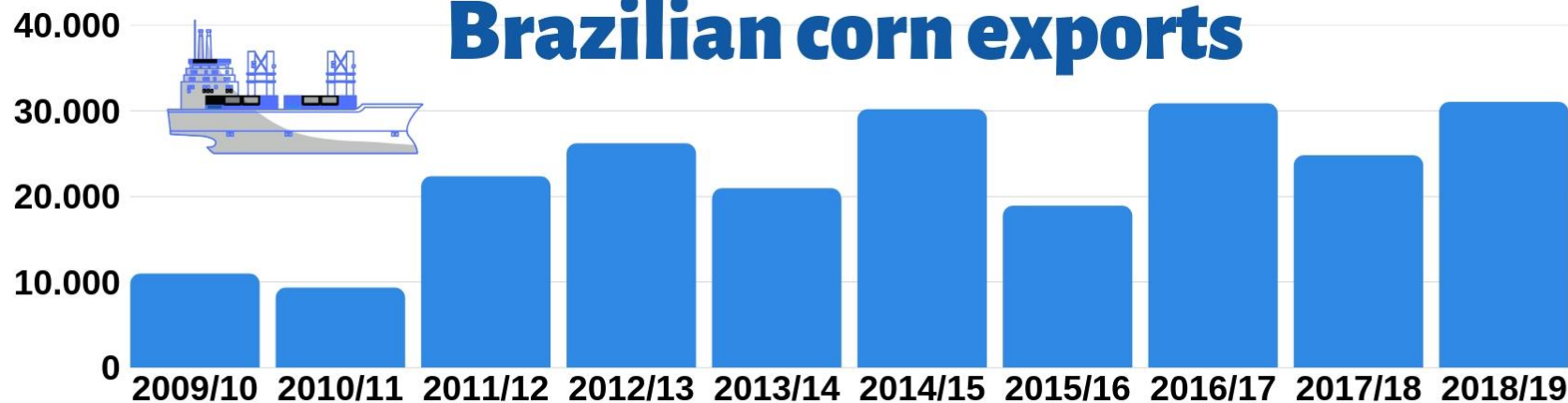
In 2017/2018, Brazil exported
83,6 million MT of brazilian
soybean and China bought
68,8 million MT



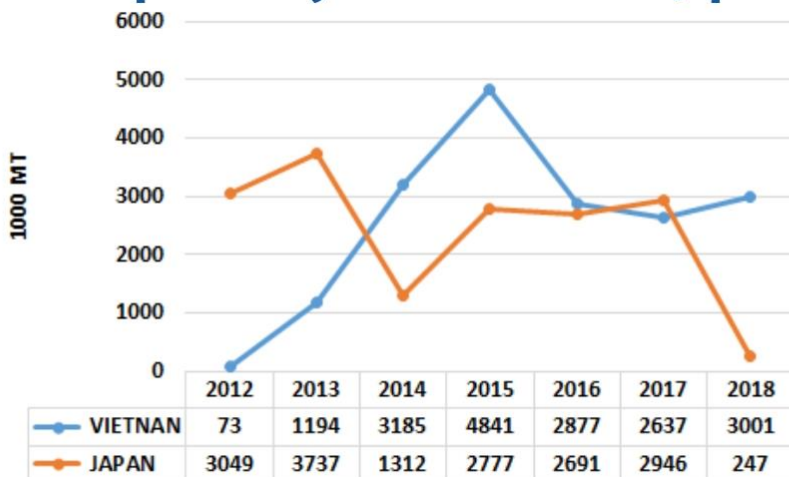
China's share of total brazilian soybean exports



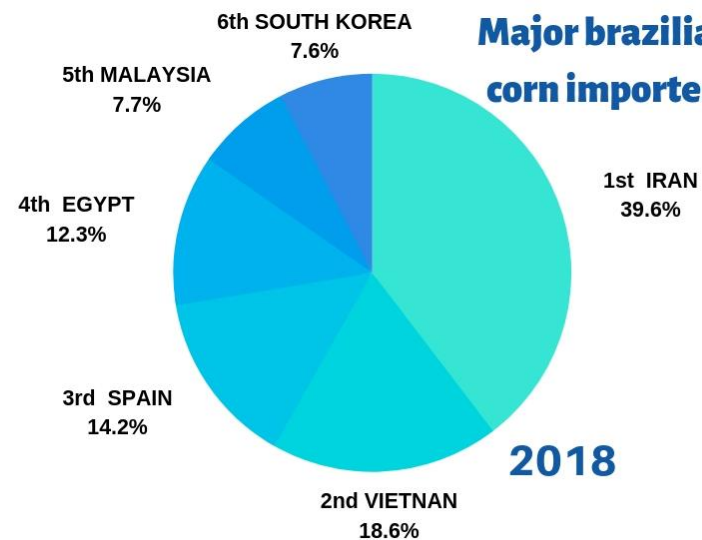
Brazilian corn exports



Imports analysis: case Vietnan vs Japan

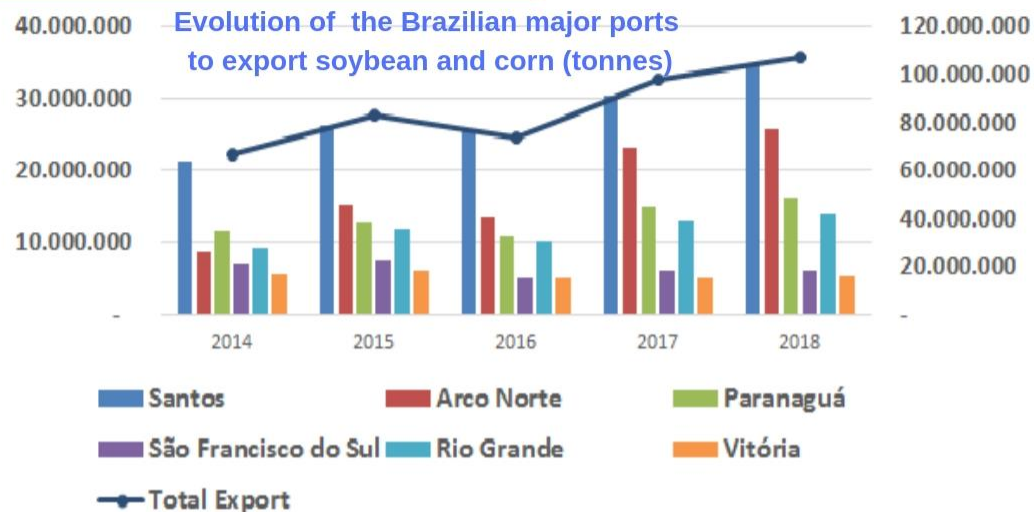


Major brazilian corn importers



Exports by ports - Soybean and Corn

Arco Norte Port's Complex




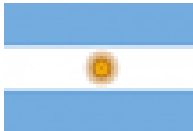

2014

2018

Main challenges

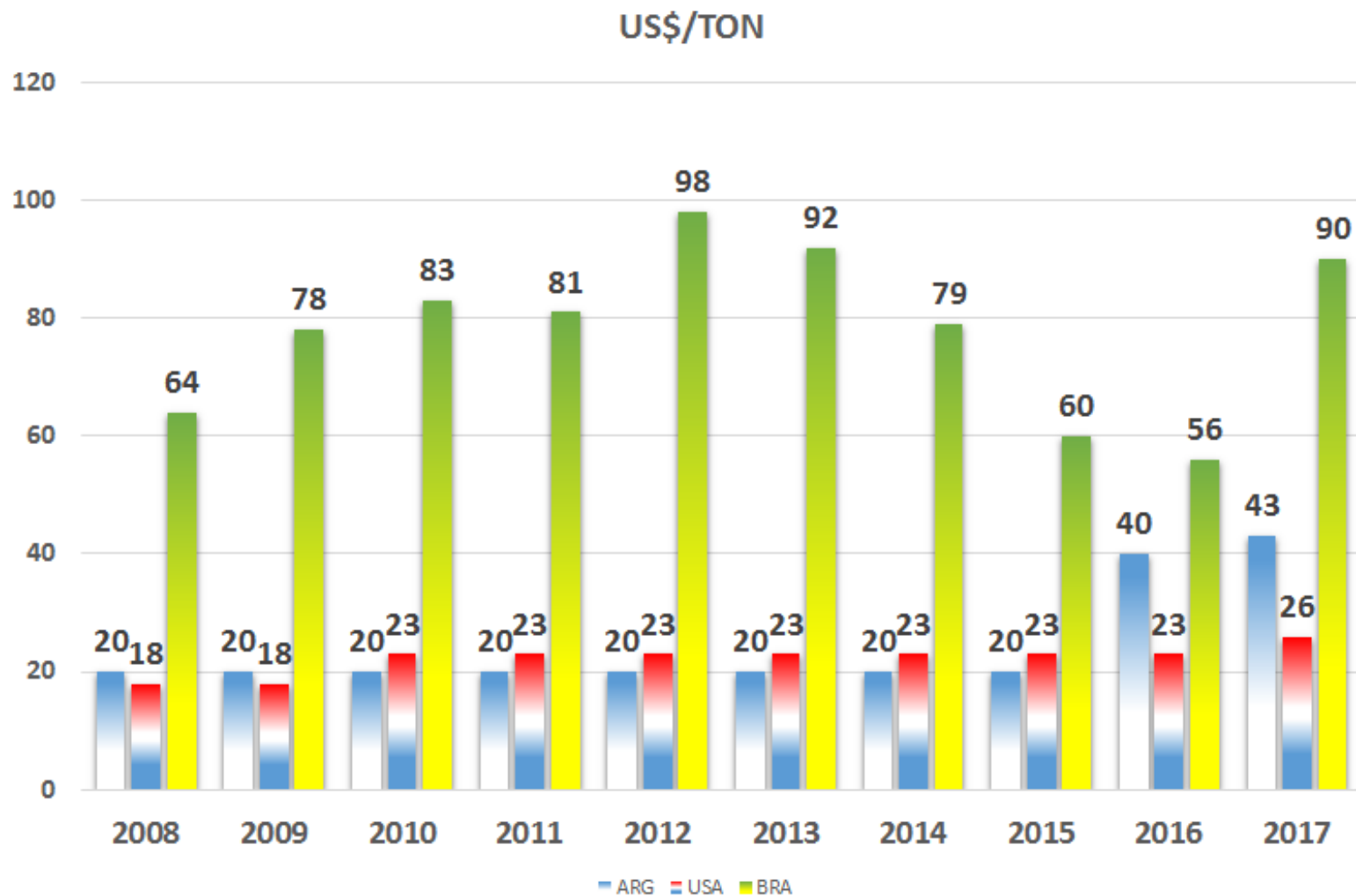
- Lack of good infrastructure of grain flow (bad roads and low amount of railroads and waterways;
- Deficit of storage structures;
- High costs of production;
- Legal insecurity (can be improved in this government)

Matrix of Grain's Transportation

| |  |  |  |
|----------------------------------|---|---|---|
| | % | % | % |
| <i>Barge</i> | 11 | 2 | 60 |
| <i>Rail</i> | 36 | 18 | 35 |
| <i>Truck</i> | 53 | 80 | 5 |
| <i>Average Distance to Ports</i> | <i>1.000 a 1.100 Km</i> | <i>250 a 300 Km</i> | <i>1.000 Km</i> |

Source: ANEC, 2010

Comparative evolution of freight costs by country



Deficit of storage



**Chicago Board of
Trade quotation**



**Exchange
variation**



**Domestic
soybean
and corn
prices**



**Domestic
demand**



**Cost of grain
flow**

Main factors which influence Brazilian soybean and corn prices

Export Parity

| ITEMS | SOYBEAN | CORN |
|--|---------------|--------------|
| 1 - Chicago quotation (Uscents/bu) | 918,00 | 377,75 |
| 2 - Premium- Paranaguá or Santos | 44,00 | 90,00 |
| 3 - F.O.B Price | 962,00 | 467,75 |
| 3.1 - FOB - Equivalent in US\$/t | 353,47 | 184,14 |
| 3.2 - FOB - Equivalent in R\$/t | 1.312,80 | 683,89 |
| 3.3 - FOB - Equivalent R\$/60 kg | 78,77 | 41,03 |
| 4 - Port expenses in R\$/t | 29,71 | 29,71 |
| 5 - Taxes | 4,46 | 4,46 |
| 6 - Brokerage exchange (0,1875% s/3.2) | 2,46 | 1,28 |
| 7 - Final Price - Port in R\$/t | 1.276,17 | 648,44 |
| 7.1 - Equivalent R\$/60 kg - Final Price | 76,57 | 38,91 |
| 7.2 - Equivalent US\$/60 kg - Final Price | 20,62 | 10,48 |
| Exchange: | 3,7140 | |

| Production Area | Soybean Sorriso MT | Corn Sorriso MT |
|---|-----------------------|--------------------|
| 7 - Price - Port in R\$/t | 1276,17 | 648,44 |
| 8 - Freight: Port - Production area (R\$/t) | 330,00 | 330,00 |
| 9 - Technical break (0.5% s/7) | 6,38 | 3,24 |
| 10 - Sub-total | 939,79 | 315,20 |
| 11 - Administrative costs (1% s/10) | 9,40 | 3,15 |
| 12 - Parity em R\$/t | 930,39 | 312,05 |
| 12.1 - Equivalent in R\$/60 kg - Area | 55,82 | 18,72 |
| 12.2 - Equivalent in US\$/60 kg - Area | 15,03 | 5,04 |

Thank you.